

REMARKS

The present amendment is in response to the Office Action dated March 19, 2008.

In the current Office Action, the Examiner has rejected claims 1, 2, 4, 5, 9, 11 to 13, 15, 16, 18 to 20, 23, 25, 26, 29 and 34 to 40 based on newly cited US Patent No. 5,039,091 of Johnson. Claims 3, 6, 8, 21, 22, 27, 28, 38, and 41 are indicated to be allowable if rewritten independently.

In the foregoing amendment, paragraph 35 of the specification has been amended, and claims 1, 2, 3, 6, 11, 13, 15, 18, 21, 25, 34, 38, and 39 are amended without prejudice or disclaimer. The other claims are unchanged. Following this amendment, claims 1 to 29, 32, and 34 to 41 are pending with claims 1, 2, 3, 6, 11, 13, 15, 18, 21, 25, 34, 38, and 39 being the independent claims. Reconsideration and allowance of all pending claims is respectfully requested in view of the amendments and the following remarks.

Allowable Subject Matter

Applicant thanks the Examiner for the indicated allowability of claims 3, 6, 8, 21, 22, 27, 28, 38, and 41. In the foregoing amendment, claims 3, 6, 21, and 38 have been rewritten as independent claims including the subject matter of the base claim and any intervening claim from which they previously depended. It is therefore submitted that claims 3, 6, 21, and 38 now in order for allowance, along with claims 7 and 8 which depend from claim 6, and claim 22 which depends from claim 21. Claims 27, 28, and 41 have not been amended, but are believed to be allowable in view of their dependence from amended independent claims 13 and 39, respectively, which are distinguished from the new prior art reference of Johnson for the reasons stated below.

Withdrawn Claims

In the Office Action, the Examiner indicates that dependent claims 7, 10, 14, 17 and 24 are withdrawn from consideration as drawn to a nonelected species. It is submitted that claim 7 depends from allowable claim 6 as noted above, and claims 10, 14, 17, and 24 each depend from an independent claim which is allowable over Johnson for the reasons stated below, and consideration and allowance of the withdrawn claims is therefore also respectfully requested.

Amendment to the Specification

Paragraph 35 has been amended above to state that the second pivot axis 26 of the exercise arm is not coaxial with the swing arm 18, as clearly illustrated in the drawings as originally filed.

This language corresponds to language added in independent claims 1, 2, 11, 13, 15, 18, 25, 34, and 39.

35 USC 102(b) – Johnson

The Examiner has rejected claims 1, 2, 5, 9, 11, and 12 as anticipated by U.S. Patent No. 5,039,091 of Johnson. This rejection is hereby respectfully traversed, and it is submitted that independent claims 1, 2, and 11 are distinguished from Johnson for the reasons stated below, along with claims 5 and 9 which depend from claim 1 and claim 12 which depends from claim 9.

For a reference to anticipate a claim, the reference must include every element of the claim. It is respectfully submitted. Johnson lacks several elements of each of the rejected independent claims. In rejecting these claims, the Examiner interprets part or tube 162 of Johnson as the main arm and part 160 as the swing arm (Figure 5), with a first pivot axis defined by axle 68 and the swing arm 160 “being freely pivotable about the second pivot axis within the predetermined angular range”, again referring to Figure 5. The Examiner argues that the pivot connection defining the second pivot axis is 168, with the pin removed. It is respectfully submitted that Johnson does not have a swing arm 160 which is freely pivotable relative to part or tube 162 about a second pivot axis within a predetermined angular range. Instead, reference number 160 is used for an accessory arm which “includes an outer bent tube which is affixed at its proximal end 164 to the flywheel axle 68 and a smaller inner tubing 166 is telescopically received therein...” (see column 6, line 66 to column 7, line 2). Thus, reference numbers 160 and 162 do not refer to arms which are pivotally secured together, but instead part 162 is an outer bent tube forming an integral part of “accessory arm 160”. This can also be seen in Figure 5, where the lead line for reference number 160 points to the outer surface of the vertical portion of bent tube 162, and Figure 20, where reference number 162 points to the lower part of the arm in which tubing 166 is telescopically engaged. The inner tubing 166 is adjustably extendable and retractable from the outer tube 162 by releasing detent 168, as described in column 7, lines 1 to 3. As illustrated in Figures 5 and 20, releasing of the spring loaded detents or pins 168 from detent holes 163 allows the detents 168 to slide within the tube 162 until released to the desired new detent holes 163 (see also column 8, lines 47 to 57). Even though the tubing 166 might be able to rotate inside tube 162 when the detents are released, this is not equivalent to a second pivot axis as defined in the claims of the present application, and there is no rotation permitted between outer tube 162 and inner tubing 166 while the exercise arm is in use. The use of

two telescopically engaged parts 162, 166 for accessory arm 160 is simply a device to allow the overall length of the arm to be increased or decreased as desired, with the length being fixed by detents 168 engaging appropriate holes 163 while the arm is in use.

As noted above, while the exercise arm 160 is in use, the inner tubing 166 is fixed and non-rotatable relative to the “main arm” 162 by the pin 168 which extends through aligned openings in the outer and inner tubes 162, 166. Referring to amended claim 1, even if the exercise arm were used with the pin retracted and sliding within outer tube 162, and tubing 166 were rotated about the axis of the telescopically engaging tubes, the second pivot axis would be coaxial with the tubing 166 or swing arm. Also, there would be no predetermined angular range of rotation of tubing 166 relative to tube 162 in this condition. The tubing could potentially rotate through 360 degrees when detent pins 168 are released. It is therefore submitted that several elements of amended claim 1 are lacking from Johnson and amended claim 1 is not therefore anticipated by Johnson. Reconsideration and reversal of the rejection of claim 1 is therefore respectfully requested.

Similar arguments apply to amended claim 2. As noted above, there is no swing arm in Johnson which is freely rotatable about a second pivot axis which is not coaxial with the swing arm. The only rotation which would be possible in Johnson between tubing 166 and outer tube 162 would be when the spring loaded detents or pins 168 were retracted inwardly from the aligned holes 163, and the axis of rotation in this case is coaxial with both the outer tube 162 and the inner tubing 166 which is coaxially/telescopically received within tube 162. It is therefore submitted that amended claim 2 is also distinguished from Johnson, and reconsideration and reversal of the rejection of this claim is respectfully requested.

Amended independent claim 11 is distinguished from Johnson for similar reasons. As noted above in connection with claims 1 and 2, Johnson does not have a swing arm pivoted to the main arm for rotation about a pivot axis which is not coaxial with the swing arm. Any rotation possible between outer tube 162 and inner tubing 166 is about an axis which is coaxial with the telescopically engaged tubes, and rotation is not intended to occur when the arm is in use, or at any time. Reconsideration and reversal of the rejection of this claim is therefore also respectfully requested.

It is noted that the Examiner defines component 168 “with pin removed” as the pivot connection between the main and swing arms. However, reference number 168 refers to two pins spring loaded into openings 163, as illustrated in Figure 20. These pins cannot be “removed” from

the connection, only pressed radially inwardly against leaf springs 165 to allow inner tube 166 to slide within tube 162 as described in column 8, lines 50 to 55.

Rejected claim 5, 9 and 12 all depend from amended claim 1 and are distinguished from Johnson for the same reasons as claim 1, and also since these claims define other elements lacking from Johnson. Referring to claim 5, there is no pivot connection between outer tube 162 and inner tubing 166 which includes a range limiting device which limits rotation about the second pivot axis to a predetermined angular range. As has been noted above, the only possible rotation which can occur between outer tube 162 and inner tubing 166 which is telescopically received in the outer tube is about the axes of the telescopically engaged tubes, and no rotation whatsoever between these tubes is possible when the detent pins 168 are engaged in the openings 163 of the outer tube 162 as seen in Figure 20. It is not clear which part of this connection the Examiner interprets to be the “range limiting device” of claim 5. If it is detent pins 168, this is not a range limiting device but a device which completely prevents relative rotation (and relative axial movement) between the inner and outer tubes 166, 162. When detent pins 168 are pressed inwardly and the tube 166 is moved relative to tube 162, some rotation may be permitted between the tubes, but there is still no range limiter to limit such rotation to a predetermined angular range, and in any case the exercise arm is not intended to be used with the detent pins released. Claim 5 is additionally distinguished from Johnson since this reference fails to describe any range limiting device as claimed in this claim.

Referring to claim 12, it is not clear which part of Johnson’s arm the Examiner is interpreting as the pivot sleeve oriented at a non perpendicular angle to the swing arm and in which the pivot shaft of the handle is rotatably secured for rotation about the third pivot axis. There is no explanation of the rejection of claim 12 as anticipated by Johnson on pages 2 to 4 of the Office Action. The pivot connection in Johnson between the tubing 166 and handle 180 comprises a universally jointed connector member 190, which has a threaded part 178 engaged in an internally threaded receptor 174 at the end of tubing 166 (see Figure 5 and column 7, lines 5 to 10), and a similar threaded connection is provided between member 190 and handle 180 (column 7, lines 10 to 12). There is absolutely no pivot shaft of handle 180 which is rotatably engaged in a sleeve oriented at a non perpendicular angle to the tubing 166 for rotation about a third pivot axis. All pivoting of handle 180 relative to tubing 166 is provided by universal joint 190, 192.

It is therefore submitted that amended claims 1, 2 and 11 and dependent claims 5, 9, and 12 are all fully distinguished from Johnson, and reconsideration and reversal of the rejection of these claims as anticipated by Johnson is respectfully requested.

Withdrawn claim 10 depends from claim 9, which is believed to be allowable for the reasons stated above. Consideration and allowance of claim 10 is therefore also respectfully requested.

35 USC 103 – Johnson

The Examiner has also rejected claims 13, 4, 15, 16, 18 to 20, 23, 25, 26, 29, 32 and 34 to 40 as obvious in view of Johnson (see page 4). It is believed that the inclusion of claim 38 in this group was an error since claim 38 is indicated to be allowable both in the Office Action summary and in the listing of allowable claims on page 5 of the Office Action. As regards the other claims rejected under 35 USC 103, it is respectfully submitted that the invention as defined in these claims is not obvious in view of Johnson, as explained in more detail below.

An invention is unpatentable if the differences between it and the prior art would have been obvious at the time of the invention. In order to establish obviousness, it is necessary to identify the reason why a person of ordinary skill in the art would have combined the prior art or modified the prior art in the manner claimed. Additionally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The reason to make the claimed combination or modifying the reference must be found in the prior art, and not based on Applicant's disclosure.

In the present case, the Examiner argues that it would be obvious to modify Johnson in the manner claimed in the claims listed above. This argument is hereby respectfully traversed. It is submitted that amended independent claims 13, 15, 18, 25, 34 and 39, along with the remaining rejected claims which depend therefrom, are not obvious in view of Johnson, since this reference does not teach or suggest all the elements of these claims nor any reason for modification on the lines claimed in these claims.

Johnson lacks elements of amended claim 13. In rejecting claim 13, the Examiner contends that it would be obvious to use a pair of exercise arms instead of a single exercise arm as in Johnson. However, even if two exercise arms as illustrated in Figure 5 were used, there would still be differences between Johnson and the apparatus as defined in amended claim 13.

Johnson has no pivot connection between a swing arm and a main arm which allows free pivoting of the swing arm in a predetermined angular range about a second pivot axis which is not

coaxial with the swing arm. As has been noted above in connection with the rejection of independent claims 1, 2 and 11, there is no swing arm in Johnson which pivots about a second pivot axis which is not coaxial with the swing arm. Any possible rotation of inner tube 166 in Johnson is about a pivot axis coaxial with both the outer tube 162 and the inner tube 166 which is telescopically engaged in the outer tube, as seen in Figures 5 and 20. Rotation about the coaxial pivot axis is only possible when the detent pins 168 are retracted or removed from openings 163 (see Figure 20), and Johnson does not intend such movement to occur when the exercise arm is in use.

It would be neither obvious nor possible to modify Johnson so that tube 166 could rotate relative to tube 162 about a pivot axis which was not co-axial with tube 166. As noted above, no relative rotation between these tubes is intended to be provided in Johnson's arrangement, since the spring loaded detents 168 are intended to engage in selected aligned openings 163 in the outer tube while the exercise arm is in use, preventing rotation of tube 166 relative to tube 162. Any possible rotation permitted is incidental to the telescoping arrangement which is only provided to allow the overall axial length of the arm to be adjusted prior to use, by adjusting the extension or retraction of telescoping inner tube 166 relative to tube 162, as clearly described by Johnson in column 7, lines 1 to 4 and column 8, lines 47 to 57. If the tube 166 were to be connected to tube 162 via a non-coaxial pivot axis, no telescoping adjustment would be possible, and there is no reason why one skilled in the field would modify Johnson in this way since Johnson does not even intend the tube 166 to be rotatable or pivotable relative to tube 162. Such a modification would also be contrary to Johnson's teachings regarding the telescoping adjustment and the desired release of detents into the "desired positioning holes to thereby achieve the preferred extension or retraction of the particular device" (column 8, lines 54 to 57). If the detent pins are retracted from the aligned holes as the Examiner suggests on page 2, where he defines the swing arm pivot connection as "168, with pin removed", the preferred extension or retraction would be completely lost since the tube 166 would be free to slide out of the outer tube 162. This is clearly contrary to Johnson's teachings and therefore not obvious.

It is submitted that amended claim 13 is not obvious in view of Johnson, and reconsideration and reversal of the rejection of this claim is respectfully requested.

Similar arguments to those stated above in connection with claim 13 apply to amended independent claims 15 and 18, which have been amended to include similar limitations to amended

claim 13. Additionally, referring to claim 18, Johnson does not describe or suggest a range limiting device as defined in this claim which limits free swinging movement of a swing arm about the second pivot axis to a predetermined angular range between an inner position and an outer position. As noted above, Johnson is not concerned with permitting rotation of inner tube 166 relative to outer tube 162 at all, let alone rotation within a predetermined angular range between inner and outer positions. The only reason for providing a telescopically engaged inner tube in Johnson is to permit axial length to be adjusted, and any relative rotation about the co-axial axes of tubes 166 and 162 is incidental to the desired length adjustment, and not desirable since it would take the spring loaded detent pins 168 out of alignment with the holes 163 in which they are intended to engage. Such rotation could occur while the length adjustment was taking place, but there would still be no range limiting device as claimed in claim 18, and introduction of such a device would have no purpose in view of the fact that the inner tube is intended to be locked in a selected position relative to outer tube 152 during use of the exercise arm, by engagement of pins 168 in the selected aligned openings, as described in column 8, lines 54 to 57. Additionally, even when such rotation could occur (i.e. when detent pins 168 are released), the rotation would not be between inner and outer positions of the swing arm, since the swing arm simply rotates about its own axis in one position.

It is therefore submitted that claims 15 and 18 are also not obvious in view of Johnson, and reconsideration and reversal of the rejection of these claims is also respectfully requested.

Amended independent claim 25 is also not obvious in view of Johnson for the same reasons as amended claim 13, and also since the handle arrangement of this claim is not taught or suggested by Johnson. Reconsideration and reversal of the rejection of this claim is also respectfully requested.

As regards amended independent claim 34, Johnson has no pivot connection between a swing arm and a main arm which allows pivoting of the swing arm about a second pivot axis, together with a swing arm having a bend separating the swing arm into first and second portions, and a first portion extending from the main arm to the bend in a direction which is not coaxial with the second pivot axis. As has been noted above in connection with the rejection of claims 1, 2, and 11, the only possible rotation which can take place between inner tube 166 and outer tube 162 can only occur when the detent pins 168 are released from the aligned holes, and any such rotation is about an axis which is coaxial with both tube 162 and the telescopically engaged portion of tube 166. Thus, the portion of tube 166 which extends from tube 162 to the bend in tube 166 is coaxial with the "second

pivot axis". Any variation from this arrangement would not be obvious since the telescoping adjustment required by Johnson would then no longer be possible. The machine as claimed in amended claim 34 is therefore not obvious.

Another difference between Johnson and the machine of claim 34 is that Johnson does not suggest a seat supported on a support frame and a pair of the exercise arm assemblies of Figure 5 secured to the frame on opposite sides of the seat. When Johnson's apparatus is used with two handles, the arm assembly or accessory 160 illustrated in Figure 5 is not used. Instead, the arm is removed and "aerobic arm devices which includes cables 54 and T-handles 58" are engaged by the user (see Figure 7 and column 8, lines 36 to 46). The accessory arm assembly 160 of Figure 5 is only intended by Johnson for use in exercises simulating the activities of Figures 27 to 32, where a single exercise arm 160 simulates a piece of athletic equipment such as a golf club, baseball bat, or paddle for gripping by both of the exerciser's hands, as described in the drawing description, column 3, lines 30 to 42, and in lines 13 to 18 of the Abstract. Based on the teachings of Johnson, there is nothing to suggest mounting of two such accessory arms on each side of a seat, since the exercises for which this accessory is intended to be used do not require two separate exercise arms or pieces of athletic equipment.

It is therefore submitted that amended claim 34 is also not obvious in view of Johnson, and reconsideration and reversal of the rejection of this claim is respectfully requested.

Similar arguments apply to amended independent claim 39. As noted above in connection with claim 34, Johnson does not suggest use of two exercise arms 160 on opposite sides of a seat, since the athletic equipment which arm 160 is intended to simulate is a single member which is gripped by both of a user's hands, whether it is a golf club, baseball bat, tennis racquet, or the like. The only exercises described by Johnson which require separate handles (e.g. bicycle riding) use a different accessory, not arm 160, as seen in Figures 7 and 22, for example. There is no motivation suggested by Johnson for mounting two exercise arm accessories of the type illustrated in Figure 5 on opposite sides of a seat, particularly since Johnson describes a different, cable based accessory for this purpose, and there is no reason to believe that arm assembly 160 would work better than this alternative accessory. Additionally, as noted above in connection with independent claims 1, 2, and 11, Figure 5 of Johnson does not have a swing arm pivoted to a main arm for pivoting about a second pivot axis which is not coaxial with the swing arm. Instead, any axis of rotation between

tubes 162 and 166 when detent pins 168 are released is coaxial with both arms. Also, Johnson does not suggest a pivot connection in each arm assembly as defined in claim 39. The tubes 162 and 166 in Johnson are clearly not pivotally connected via a pivot connection comprising a pivot bracket on one arm or tube having spaced end plates projecting over the other arm or tube, and a pivot pin extending between the end plates and rotatably linked to the other arm or tube. Instead, any pivotal connection between arms 162, 166 when detent pins 168 are released is provided by the telescoping engagement of the end of arm 166 inside outer tube 162.

Since several elements of amended claim 39 are completely lacking from Johnson, and no motivation for modifying Johnson to provide these elements is suggested in any way by the teachings of Johnson, it is submitted that claim 39 is also not obvious in view of Johnson, and reconsideration and reversal of the rejection of this claim is respectfully requested.

Rejected claims 4, 23, 26, 29, and 32 depend from claim 13 and are distinguished from Johnson for the same reasons as amended claim 13, and additionally since these claims define other elements which are neither taught nor suggested by Johnson.

Referring to claim 4, Johnson neither describes nor suggests mounting of a pair of exercise arm assemblies each corresponding to accessory arm 160 of Figure 5 on a frame with inboard sides facing one another with each handle 180 pivoted to the inboard side of the arm. The arm 160 of Johnson is designed for use on its own, with both hands of the user gripping the arm as seen in Figures 27 to 32, and the handle end of the arm extending outwardly from the frame. There is no motivation suggested by Johnson for modifying his machine to provide the elements claimed in claim 4. The Examiner's suggested motivation is simply that it is known to provide a pair of exercise arms for exercising both arms simultaneously. However, the types of exercise described by Johnson in connection with the accessory of Figure 5 do not require separate exercise arms, e.g. golf, baseball, canoeing, and the like. Weightlifting in Johnson also uses only one exercise arm with an extended handle, as seen in Figures 23 and 24. The only exercise using separate handles is a bicycle exercise as in Figures 7 and 20, and that does not even use the arm 160 of Figure 5. It is therefore submitted that it would not be obvious to modify Johnson to provide two arms 160 on a frame which faced towards one another. This would add significant additional structure and associated expense (a second flywheel and associated supporting frame facing the frame 10 of Figure 1) and would not be

necessary based on Johnson's teachings. Reconsideration and reversal of the rejection of claim 4 is therefore also respectfully requested.

Claim 26 depends from claim 23, which in turn depends from amended claim 13. The elements defined in claim 26 are also not suggested by Johnson. There is no grip in the arm of Figure 5 which has annular guards at opposite ends as defined in claim 26. Reconsideration and reversal of the rejection of claims 23 and 26 is therefore also respectfully requested.

Claim 32 also depends from amended claim 13 and the subject matter of claim 32 is also neither described nor suggested by Johnson. As has been noted above, there is no teaching in Johnson which would motivate one skilled in the field to use two of the arm assemblies of Figure 5, let alone having two main arms (which the Examiner defines as arm 162) having first locations secured together. Referring back to claim 13, the first location of each main arm is the location which is pivoted on a frame of an exercise machine. In Johnson, the "first location" of arm 162 is the end which is secured to the axle 68 of flywheel 16 (see also 68A of Figure 1). How could a second, identical arm 162 be secured to the end of arm 162 which is connected to axle 68, or anywhere else on axle 68, while still allowing room for the second arm assembly and handle 180? It is submitted that such a modification of Johnson is not possible, and it is respectfully requested that the rejection of claim 32 be reconsidered and reversed. Alternatively, it is respectfully requested that the Examiner provide an explanation of how the structure of Figure 5 of Johnson could be modified to provide a second arm assembly with a second main arm 162 connected to the illustrated main arm 162 so as to be secured to the frame at a single pivot connection, and why such a modification would be obvious.

Claim 16 depends from amended independent claim 15 and is distinguished from Johnson for the same reasons as claim 15, and also since Johnson neither describes nor suggests any reason for providing two exercise arm assemblies defining a central axis of an exercise apparatus, nor handles on the inboard sides of each of the arm assemblies (see argument above in connection with claim 4). Reconsideration and reversal of the rejection of this claim is therefore also respectfully requested.

Claims 19 and 20 depend from amended claim 18 and are distinguished from Johnson for the same reasons as claim 18. Referring to claim 18, there is no range limiting device in Johnson which limits rotation of a swing arm between an inner and outer position. Referring to claim 19, no inner rest position is defined by a range limiting device in Johnson's arm 162, 166. It appears that the arm

160 of Johnson would hang vertically downward when released, due to gravity. There is clearly absolutely no structure in Johnson which would limit rotation of the arm 160 into this position. There is also no structure to limit any rotation of tube 166 relative to the remainder of arm 160, other than detent pins 168 which completely prevent any rotation and do not define any predetermined angular range of rotation. As regards claim 20, it is unclear why the Examiner considers that Johnson's arm assembly of Figure 5 includes swing arms angled outwardly in a rest position, along with the structure of claim 19. Reconsideration and reversal of the rejection of claims 19 and 20 is therefore also respectfully requested.

Claim 35, which depends from amended claim 34, includes similar limitations to claims 18 and 19 as regards the range limiting device and inner rest position, and the arguments above in connection with claim 19 apply equally to this claim. Claim 36 depends from claim 35 and is similarly distinguished from Johnson. Claim 37 depends from claim 34 and is distinguished from Johnson for the same reasons as claim 34.

Claim 40 depends from claim 39 and is distinguished from Johnson for the same reasons as claim 39. Additionally, not only does Johnson have no pivot connection with end plates as defined in claim 39, it also has no range limiting device as defined in claim 40 which is mounted between such end plates.

It is submitted that there is absolutely no teaching or suggestion in Johnson or any other reference which would motivate one skilled in the field to modify Johnson on the lines claimed in any of claims 13, 4, 15, 16, 18 to 20, 23, 25, 26, 29, 32, 34 to 37, 39 or 40, and reconsideration and reversal of the rejection of these claims as obvious in view of Johnson is respectfully requested in the light of the foregoing amendment and argument.

Withdrawn claims 14, 17 and 24 depend from amended claim 13, which is now believed to be allowable as explained above, and consideration and allowance of these claims is also respectfully requested.

CONCLUSION

It is believed that claims 1 to 29, 32, and 34 to 41 are now in condition in all respects for allowance, for the reasons stated above. Early notice to this effect is earnestly solicited. If the Examiner finds any remaining impediment to the prompt allowance of these claims that could be clarified with a telephone conference, the Examiner is respectfully requested to initiate the same with the undersigned.

Respectfully submitted,

Procopio, Cory, Hargreaves & Savitch LLP

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By: Katherine Proctor
Katherine Proctor
Reg. No. 31,468

Procopio, Cory, Hargreaves & Savitch LLP
530 B Street, Suite 2100
San Diego, California 92101-4469
(619) 238-1900
Customer No. 27189